# NEVADA DIVISION OF ENVIRONMENTAL PROTECTION FACT SHEET

(pursuant to NAC 445A.236)

**<u>Permittee Name</u>**: Newmont Nevada Energy Investment, LLC - TS Power Plant

427 Ridge Street, Suite C Reno, Nevada 89501

Permit Number: NEV2004528

<u>Description of Discharge</u> Cooling tower and boiler blowdown water, equipment sumps, floor drains and wash water, service water, filter backwash, RO reject water, neutralization wastewater, and oil/water separator water will be discharged to double lined evaporation ponds. Cooling tower water may be used for dust suppression on the plant site roads.

**Location**: TS Power Plant 200 megawatt Power Plant

3 miles north of the Dunphy exit on I-80 and approximately 15 miles

northeast of Battle Mountain, Nevada. Latitude: 40.7N; Longitude: 116.5 W Sections 11 and 14, T.33N., R.48E. MDB&M

**Eureka County** 

## **Characteristics**:

Flow: 0.22 MGD limit

#### Outfalls:

Outfall 001 - Pond 1, Outfall 002 - Pond 2, Outfall 003 - Pond 3, Outfall 004 - Pond 4, Outfall 005 - onsite dust control with cooling water

Parameters: Monitored Quarterly; Annually for Priority Pollutant Metals

TDS, Calcium, pH, Chloride, Oil and Grease, TPH, Sulfate, Sodium. and a Priority Pollutant Metals Scan.

General: Newmont Nevada Energy Investment, LLC (Newmont) proposes to operate the TS Power Plant 24 hours a day. The TS Power Plant will consist of one 200 megawatt facility which will be a coal-fired steam-turbine electric generation facility designed to burn low-sulfur coal from the Powder River Basin (Wyoming). The plant will have State-of-the-art emission control equipment (per Fluor Daniel) installed. The one unit facility will have a multi cell mechanical-draft cooling tower which will be supplied with water from the Leeville and Barrick gold mines dewatering via the TS Ranch reservoir and a two mile long pipeline ending at the lined raw water makeup pond. This water is piped directly to the Cooling Tower for makeup water, to the Turbine Building and the Boiler Building for service water, and on to the emissions scrubber system, to

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the coal and coal ash handling systems, and provides source water for the fire suppression system. This cooling water will be recirculated nine times prior to disposal in the lined evaporation ponds. Two onsite wells will supply water for domestic needs and provide boiler feed water after being filtered and treated with both a reverse osmosis (RO) System and a mixed bed demineralization system to produce boiler quality makeup water for the steam cycle. Boiler blowdown water and the RO reject water is directed to the cooling tower and from there after recycling up to nine times, is discharged to the lined evaporation pond. The plant consists of a coal-fired boiler, a turbine-generator unit, a baghouse for particulate control, a 350 foot stack, a mechanical-draft cooling tower, and a water supply. Additionally there is a coal storage, supply and handling system; four lined evaporation ponds for disposal; a fire protection system; a landfill for ash disposal; stormwater control facilities; rail facilities; roads; transmission facilities; a warehouse and a main administration building.

The four evaporation ponds will be situated to the east of the power plant, and will be about 21.5 acres each in size, and approximately 3 feet deep with 3 feet of free board. The ponds will have HDPE liners: a primary 80 mil liner, geonet drainage layer and a 60 mil secondary liner with leak detection inspection sumps. The ponds are interconnnected with piping for efficient pond management and maintenance. The ponds are fenced and designed to have a zero-discharge standard of performance.

The Permittee has applied for a permit to discharge the facility wastestreams to the four lined evaporation ponds for disposal. Domestic sewage generated on site is discharged to an onsite septic system.

Receiving Water Characteristics: Shallow groundwater is potable, however it will be treated via a RO system for facility drinking water and other uses. Depth to groundwater varies across the site from 10 to 18 feet. An up gradient and a downgradient monitoring well will be required to be installed for water quality monitoring. Required monitoring will include: pH, Depth to Groundwater, Groundwater Elevation, TDS, Sodium, Sulfate, Chlorides, Calcium, Specific Conductivity, and Magnesium quarterly, and a priority pollutant metals scan annually.

#### **Procedures for Public Comment:**

The notice of the Division's intent to issue a permit authorizing the facility to discharge to the evaporation ponds (zero discharge) subject to the conditions contained within the permit, is being sent to the **Reno Gazette-Journal and Elko Daily Free Press** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a period of 30 days following the date of the public notice, by June 27, 2005. The comment period can be extended at the discretion of the Administrator.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, or any interested agency, person or

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group of persons.

The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted.

Any public hearing scheduled by the Administrator must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings must be conducted in accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

## **Proposed Determination**

The Division has made the tentative determination to issue the proposed permit for a period of five (5) years..

# Proposed Effluent Limitations, Schedule of Compliance and Special Conditions

Flow: 0.22 MGD

TDS: Monitor and Report

Sodium Monitor and Report pH: Monitor and Report Calcium: Monitor and Report Oil & Grease: Monitor and Report Chloride: Monitor and Report TPH: Monitor and Report

Sulfate: Monitor and Report

Priority Pollutant Metals Scan: Monitor and Report

1. antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium, zinc.

A pond Operations and Maintenance Manual will be required within 90 days of pond use.

# **Rationale for Permit Requirements**

Groundwater Monitoring is required to ensure that groundwater quality is not adversely affected, and pond monitoring is required to ensure proper operation of the ponds, and, to characterize the water contained in the evaporation ponds.

Prepared by: Icyl Mulligan

(5/05)